

# Testing of Mixed Signal Integrated Circuits Generating Analog Signals From Digital Data Elements

## Abstract

Testing of a mixed signal integrated circuit (IC) potentially in the form of a die using a tested/calibrated integrated circuit. In an embodiment, the mixed signal IC generates an analog signal from a symbol, and transmits the analog signal to the calibrated integrated circuit. The calibrated IC determines a valid symbol corresponding to the signal level (e.g., voltage) of the received analog signal, and determines a deviation of the signal level of the received analog signal from the voltage level corresponding to the valid symbol. The deviation is deemed to represent the degree of defect of the mixed signal IC based on the assumption that the calibrated IC operates accurately. The deviation is used to either discard or qualify/accept the mixed signal IC.